## Astragalus remotus (M. E. Jones) Barneby

## SPRING MOUNTAINS MILKVETCH

**FAMILY:** Fabaceae, the legume family.

**SYNONYMS:** Astragalus arrectus var. remotus

**STATUS:** 

Heritage Program SENSITIVE LIST, ranks: G2 S2

**USFWS/ESA:** species of concern. **STATE OF NEVADA:** none. **BLM:** Special Status Species. **USFS:** Humboldt-Toiyabe NF Sensitive Species. **NNNPS:** watch list.

POPULATION CENSUS: 17 occurrences mapped; total estimated individuals 5018+, total estimated area 202+ ha (499+ ac). TREND: unknown.

**IMPACTS AND MAJOR THREATS:** U.S. Forest Service: existing threats include livestock and wild horse grazing, heavy recreation use of the mountains from the Las Vegas population, and frequent fires in the area.

**INVENTORY EFFORT:** Not yet systematically surveyed. Most recent entered survey 1998, average year of last survey 1968. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs**: 5.9%; **6-10 yrs**: 17.6%; **11-20 yrs**: 5.9%; **21-30 yrs**: 29.4%; **31-50 yrs**: 11.8%; **51+ yrs or unknown**: 29.4%.

**LAND MANAGEMENT** in decreasing predominance: U. S. Bureau of Land Management, Humboldt-Toiyabe National Forest, private lands, Nevada state lands (?).

**RANGE:** Clark County, Nevada. Endemic to the southeastern slopes of the Spring Mountains. Maximum **range dimension** 31.8 km (19.8 mi) excluding most disjunct record.

ELEVATIONS RECORDED: 3400-7050 feet (1036-2149 meters).

**HABITAT:** Rocky, gravelly, and/or sandy calcareous soils derived from carbonate or sandstone, in washes and drainages, or on hillsides or rocky ledges, with the zonal desert shrub or desert wash communities.

PHENOLOGY: flowering spring. Range of most frequent survey months: April-May.

**LIFE-FORM AND HABIT:** perennial herb.

**DESCRIPTION:** A perennial herb with several erect stems, 1.5-4 dm long, and with buff-colored, lilac tinged flowers in bloom April-early June.

**PHOTOGRAPHS:** Weixelman and Atwood (1990); Nevada Natural Heritage Program images web page (1998-present), slide collection (1986-present), and files.

ILLUSTRATIONS: Weixelman and Atwood (1990).

**OTHER GENERAL REFERENCES** (listed separately): Barneby (1964), Clokey (1951), Nachlinger (1994), Niles et al. (1998), Spahr et al. (1991).

## **SPECIFIC REFERENCES:**

Barneby, R. C. 1944. Pugillus astragalorum III. Leaflets of Western Botany 4: 49-63.

Morefield, J. D. 1992. Status report for Opuntia whipplei Engelmann and Bigelow var. multigeniculata (Clokey) L. Benson. Carson City: Nevada Natural Heritage Program, prepared for the U. S. Fish and Wildlife Service, Reno.

WESTEC Services, Inc. 1980. Field research of rare plants in Las Vegas ES area, Clark County, Las Vegas, Nevada. Las Vegas: Bureau of Land Management.